

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

1. (currently amended) A method for sterilizing and producing a fish-paste product by utilizing ozone gas-containing microbubbles comprising the steps of:

adding the ozone gas-containing microbubbles generated in water to raw materials of a fish-paste product;

pestling the raw materials of the fish-paste product after the step of adding the ozone gas-containing microbubbles;

coating interfaces of the ozone gas-containing microbubbles with protein and lipid in tissues composed of the raw materials during the step of pestling of the fish-paste product, the tissues including proteins and lipids contained in the fish-paste product, thereby maintaining the longevity of the ozone gas-containing microbubbles thereby creating coating shells composed of said tissues protein and lipid; said shells covering the ozone gas-containing microbubbles; and

giving a first stimulation to a part of the ozone gas-containing microbubbles thereby rupturing the coating shells of the ozone gas-containing microbubbles while said ozone gas-containing microbubbles are in the raw materials fish-paste product, thereby sterilizing the fish-paste product by the formation of active oxygen and free-radical species; and

giving a second stimulation to another part of the ozone gas-containing microbubbles while processing and packaging the fish-paste product, thereby further sterilizing the fish-paste product by the further formation of active oxygen and free radical species;

wherein the ozone gas-containing microbubbles have a diameter of 50 μ m the further formation of active oxygen and free radical species kill germs contaminated to the raw materials in the producing process of the fish-paste product and wherein the fish-paste product is germ-free and has an effect of being sterilized in a state of final-product.

2. (cancelled)

3. (original) A method according to Claim 1, wherein the step of adding the ozone gas-containing microbubbles to raw materials of the fish-paste product comprises adding water containing the ozone gas-containing microbubbles.

4. (canceled)

5. (previously presented) A method according to Claim 1, wherein the step of adding the ozone gas-containing microbubbles to raw materials of the fish-paste product comprises spraying a mist of water containing the ozone gas-containing microbubbles.

6.- 8. (canceled)

9. (currently amended) A method according to Claim 1, wherein the first stimulation comprises rubbing together the raw materials of the fish-paste products containing the ozone gas-containing microbubbles tentatively stabilized by the coating shells at the step of pestling of the raw materials.

10. (canceled)

11. (currently amended) A method according to Claim 1, wherein the second stimulation comprises high-frequency irradiation of raw materials containing the ozone gas-containing microbubbles tentatively stabilized by the coating shells ~~of the fish-paste product.~~

12. (canceled)

13. (currently amended) A method according to Claim 1, wherein the second stimulation comprises microwave irradiation of raw materials containing the ozone gas-containing microbubbles tentatively stabilized by the coating shells ~~of the fish-paste product.~~

14. (canceled)

15. (currently amended) A method according to Claim 1, wherein the second stimulation comprises heating raw materials containing the ozone gas-containing microbubbles tentatively stabilized by the coating shells of the fish-paste product.

16.- 19. (canceled)

20. (new) A method according to Claim 1, wherein the pestling is continued for 20 minutes during which the relative speed of a pestle to a mortar is kept at 15 cm/s.

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